

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/538,481	GOTO, HIDETSUGU	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ganapathirama Raghu	1652	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/01/07.
2. ☒ The allowed claim(s) is/are 8-24.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

### **DETAILED ACTION**

Claims 8-24 are pending in this application and are being considered for examination. Applicants' amendments and arguments filed on March 01, 2007, have been fully considered and are deemed to be persuasive to overcome the rejections previously applied. Rejections and/or objections not reiterated from previous office action are hereby withdrawn.

#### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). This application is a 371 PCT/JP03/15542 filed on 12/04/2003 and claims the priority date of Japanese application 2002-356844 filed on 12/09/2002.

#### ***Drawings***

The drawings are accepted.

#### ***EXAMINER'S AMENDMENT***

An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it must be submitted no later than the payment of the issue fee.

An amendment to claims was sent via fax to the examiner by applicant's representative Thomas Cunningham (Reg. No. 45,394) on 03/27/07.

The application has been amended as follows:

#### ***In the Claims***

Please enter the claims amendments as submitted by applicant's attorney on 03/27/07 and enclosed herein.

***Allowable Subject Matter***

Claims 8-24 are allowed.

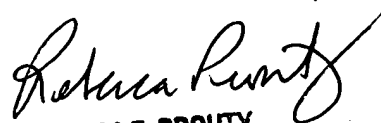
The following is an examiner's statement of reasons for allowance: Following a diligent search, it was determined that the closest prior art disclosed by Leipelt et al., (JBC., 2001, Vol. 276 (36): 33621-33629) and Jorasch et al., (Eur. J. Biochem., 2000, Vol. 267: 3770-3783), wherein they have disclosed the isolation and identification glycosylceramide synthases (UDP-glucose:ceramide glucosyltransferase) from many different species ranging from plant, nematode and a variety of fungi. The prior art neither teaches nor suggests the polynucleotide with SEQ ID NO: 1 or the encoded polypeptide of SEQ ID NO: 2, glycosylceramide synthase (GCS) like protein, having the ability to enhance the temperature tolerance of acetic acid producing bacteria such as *Acetobacter* and *Gluconobacter* as claimed in claims 8-24. The utility of said polynucleotide as encoding said polypeptide with the ability to enhance the temperature tolerance of acetic acid producing bacteria, is credible based on expression in acetic acid producing bacteria and analysis of the activity of said polypeptide. Said polypeptide with the ability to enhance the temperature tolerance of acetic acid producing bacteria has real-world utility and permits the use of said polypeptide in industrial applications for the production of acetic acid.

Any comments considered necessary by applicant must be submitted no later than the payment of issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ganapathirama Raghu whose telephone number is 571-272-4533. The examiner can normally be reached on 8 am to 4.30 pm EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 571-272-0928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300 for regular communications and for After Final communications. Any inquiry of a general nature or relating to the status of the application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

Ganapathirama Raghu, Ph.D.  
Patent Examiner  
Art Unit 1652  
March 27, 2007.

  
REBECCA E. PROUDY  
PRIMARY EXAMINER  
GROUP 1800  
1610